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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,227	04/04/2001	Jeremy Klug	P-1030	2460

7590 09/29/2003

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EXAMINER

BOSS, WENDY L

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 09/29/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/826,227

Applicant(s)

KLUG, JEREMY

Examiner

Wendy Boss

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-10,12 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 2,4,11 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5-10, 12 and 14-18 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2002/0160250 (Woods).

Woods discloses a material useful as a substrate for an embossed flexible graphite sheet having a predetermined morphology (see paragraphs 0037 and 0038). The material in the reference comprises a flexible graphite sheet formed of compressed particles of exfoliated graphite, having a void condition selected to produce the predetermined morphology upon embossing (see paragraphs 0033, 0038, and 0039). Woods further discloses that the flexible graphite sheet is subjected to the application of pressure to provide the selected void condition (see paragraph 0026). The reference also discloses that the flexible graphite sheet is impregnated with resin (see paragraph 0027). At paragraph 0077, the reference discloses that the resin is present at a level of at least about 5% in the flexible graphite sheet, as recited in claim 6. The resin used in the reference may comprise an acrylic-based resin system, an epoxy-based resin system, or a phenolic-based resin system (see paragraph 0027). Woods also discloses a process for producing the above material useful as a substrate for an embossed flexible graphite sheet, as

Art Unit: 1775

recited in claim 10. At paragraph 0031, Woods discloses that the sheet may be used as an anode or cathode fuel plate in a fuel cell, which suggests that the sheet has desired physical properties.

The reference does not necessarily disclose that the embossing is performed using the apparatus recited in claims 8 and 9; however, patentability of an article depend on the article itself and not the method used to produce it (see MPEP 2113).

Response to Arguments

3. Applicant's arguments with respect to claims 1, 3, 5-10, 12 and 14-18 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

4. Claims 2, 4, 11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or suggest the claimed material useful as a substrate for an embossed flexible graphite sheet, wherein the flexible graphite sheet is relatively void-free prior to embossing, or that the graphite sheet is densified to a density of at least 1.1 g/cc prior to embossing. In the Woods reference, the flexible graphite sheet does not become relatively void free, or denser than 1.0 g/cc until after embossing.

Art Unit: 1775

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wendy Boss whose telephone number is 703-306-5922. The examiner can normally be reached on M-Th 8:30a-6:00p; 2nd.F 8:30a-5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 703-308-3822. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Wendy Boss
September 10, 2003